

NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL (“NDCAP”)

Wednesday, February 20, 2019

**Plymouth Community Intermediate School (“PCIS”), Little Theatre, 117 Long Pond Road,
Plymouth, MA
Meeting Minutes**

Meeting called to order at 6:30 p.m. by NDCAP Chair Sean Mullin.

NDCAP MEMBERS PRESENT:

- Pat Ciaramella, Representative of Old Colony Planning Council
- H. Joseph Coughlin, Member from Plymouth Nuclear Matters Committee
- Pine duBois, Speaker of the House Appointee
- Robert Hayden¹, Department of Public Utilities
- David Johnston², Department of Environmental Protection=
- Robert Jones³, Executive Office of Health and Human Services
- Joseph Lynch, Representative of Pilgrim Nuclear Power Station
- Sean Mullin, Minority Leader of the Senate Appointee (Chair)
- David C. Nichols, Governor Baker Appointee
- John Ohrenberger, Representative of Pilgrim Nuclear Power Station
- Kevin O’Reilly, Speaker of the House Appointee (Vice-Chair)
- Jack Priest, Department of Public Health, Radiological Control Program
- Richard Rothstein, Representative of the Town of Plymouth
- Paul D. Smith⁴, Representative of UWUA Local 369
- John Viveiros, Massachusetts Emergency Management Agency
- Senator Dan Wolf, President of the Senate Appointee

NDCAP MEMBERS NOT PRESENT:

- John Chapman, Executive Office of Housing and Economic Development
- John G. Flores, Appointee of Governor Baker
- Richard Grassie, Minority Leader of the House Appointee
- John T. Mahoney, Representative of the Town of Plymouth

INTRODUCTION AND REVIEW OF NOVEMBER AND JANUARY MEETING MINUTES:

Chair Mullin announced that Kurt Schwartz was departing from his role at MEMA and would therefore no longer serve on the Panel. He also announced that Jessica Casey had moved out of the area and would also no longer serve on the Panel.

Chair Mullin asked whether any Panel members had any proposed revisions to the November 28 meeting minutes. Mr. Coughlin noted a minor typo. Mr. Coughlin also noted the minutes show that, on occasion, the Panel requests follow-up materials from guest speakers, but that those materials may not be received by the Panel. He suggested that the Panel be diligent about following up on such requests. Chair Mullin requested that Mr. Coughlin send him a note listing those follow up items.

¹ Designee of Angela O’Connor (DPU)

² Designee of Secretary Beaton (EEA)

³ Designee of Secretary Sudders (Executive Office of Health and Human Services)

⁴ Designee of Richard Sherman (Representative of UWUA Local 369)

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2 Mr. Coughlin asked whether the interagency working group had contracted for administrative support
3 that would be available to the Panel. Mr. Johnston responded that a contract has been signed, but that
4 it does not include administrative services. He noted that the contract was with an entity that provides
5 support with the interagency working group and the Attorney General's office in developing litigation
6 materials. Chair Mullin also noted that Mr. Schwartz had been responsible for posting Panel materials
7 to the Panel's website, and that need would have to be filled. He also explained that there would be a
8 need for the Panel to provide closed captioning. Chair Mullin called for a motion to accept the
9 November 28 meeting minutes, which passed with two abstentions. Next, Chair Mullin asked whether
10 any Panel members had any proposed edits to the January 16 meeting minutes. Mr. Lynch and Mr.
11 Rothstein proposed clarifying edits. Chair Mullin called for a motion to accept the January 16 meeting
12 minutes with those edits, which passed by a unanimous vote of the members present.
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14 **UPDATE ON INTERAGENCY WORKING GROUP AND ATTORNEY GENERAL'S OFFICE:**

15 Mr. Johnston announced that the Interagency Working Group ("IWG") had retained Four Points as a
16 service contractor to assist with the decommissioning process. He noted that the bulk of the work has
17 involved the motion to intervene in the Pilgrim license transfer proceeding at the NRC. He explained
18 that by intervening, the IWG and Attorney General can best protect the state's interests. He noted that
19 the other priorities include cost containment, safe plant shutdown, spent fuel management, maintaining
20 increased radiological and non-radiological cleanup standards, and emergency planning.
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22 Chair Mullin explained that the meetings with Holtec and Entergy will continue, and noted that local
23 considerations are also being taken into account. He noted that the Governor's office and Attorney
24 General have devoted significant resources to the decommissioning. Mr. Smith noted that the Attorney
25 General was originally left off the Panel to maintain independence of both the Panel and the Attorney
26 General. Senator Wolf responded that the legislation establishing the Panel originally included the
27 Attorney General, but that Panel membership changed during the legislative process. He noted that the
28 AG is an important part of the decommissioning process.
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30 **STATUS UPDATE FROM ENTERGY:**

31 Mr. Lynch recapped the regulatory status of the license transfer. In November 2018, Holtec and Entergy
32 submitted to the NRC a joint license transfer application, and Entergy and Holtec separately submitted
33 PSDARs along decommissioning cost estimates, spent fuel management plan, and commingled funds
34 exemption. The NRC subsequently completed their staff review of these documents in December 2018.
35 Mr. Lynch explained that the PSDARs were made available in December, and shortly thereafter it was
36 noticed in the Federal Register, triggering a 90-day comment period. He stated that comment period
37 ends on March 21. Mr. Lynch explained that the NRC held a public meeting to discuss the PSDARS and
38 license transfer application on January 15, and on January 31, the joint license transfer application was
39 noticed in the Federal Register, triggering a 20-day request for hearing period and a 30-day comment
40 period.
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42 With regard to dry fuel storage, Mr. Lynch explained that the original pad currently contains 17 loaded
43 canisters, each containing 68 fuel assemblies, and that this completes all planned loading in advance of
44 the Pilgrim shutdown. He noted that there will ultimately be a need for 61 casks, and that a second pad
45 is therefore required. He explained that the second pad has been designed and will have a capacity of
46 70 casks in a 7x10 array, at 75 feet above mean sea level and 700 feet from the shoreline. He explained
47 that Entergy internal approvals are complete, and that Entergy has submitted a zoning permit
48 application to Plymouth, and noted that construction is expected to begin in 2019. The fuel transfer

1 campaign will commence in 2020 and take two years. Showing a map of the Pilgrim site, he explained
2 where the new pad will be situated. He noted that the distance to Rocky Hill Road is roughly 300 feet.
3 Mr. Ciaramella asked how big an area it is. Mr. Lynch responded that he believes it to be 1.5 acres but
4 that he could provide more detailed information.

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6 He stated that the nuclear decommissioning trust fund balance was \$1.028 billion on December 28,
7 which is a decrease from its \$1.068 billion at the end of 2017. He explained that the \$40 million
8 difference is the result of market fluctuations and the payment of administrative trust-related expenses.
9 Regarding Senator Wolf's prior question about taxes being paid out of the fund, Mr. Lynch noted that
10 taxes are a qualified withdrawal from the trust, but that the commingled fund exemption would be
11 required for spent fuel-related taxes. Mr. Nichols asked which PSDAR Mr. Lynch was discussing earlier in
12 the presentation. Mr. Lynch explained that he only discussed the Entergy PSDAR, and that the NRC will
13 not review the Holtec PSDAR until the license transfer is approved. Mr. Coughlin asked if the IWG will
14 submit comments on the PSDARs. Mr. Johnston responded that they have reviewed both PSDARs.
15 Chair Mullin noted that he had spoken with the NRC about the timetable for upcoming milestones in the
16 NRC proceedings, and noted that the NRC was unable to provide a timetable. Mr. Rothstein noted that
17 the NRC has stated that interventions could delay proceedings.

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19 Mr. Ohrenberger provided an update on Pilgrim employees. Entergy established a program for all
20 Pilgrim employees to remain Entergy employees at sites in other areas of the country. He stated that
21 115 individuals began the process, that 51 are advancing through the process, and that 34 have
22 committed to new positions within Entergy. Entergy has held employee information sessions on 401k
23 plans and pension benefits. He stated that the MA Department of Career Services has also assisted
24 employees with careers services and that relocation services representatives have been available.
25 Training for future career opportunities has also been made available. Mr. Ciaramella asked what
26 happens to the employees not opting to relocate. Mr. Ohrenberger responded that some will stay in the
27 phase 1 organization, some will retire, and that some will pursue local opportunities with other
28 employers. Mr. Nichols asked whether any government assistance was requested that was not
29 provided. Mr. Ohrenberger responded that the Department of Career Services has been very helpful
30 throughout the process. Chair Mullin stated that he would like to know the specific numbers of
31 employees opting to move to other regions while working for Entergy.

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33 **DISCUSSION OF NPDES PERMIT:**

34 Ms. duBois stated that Holtec and CDI rely in their PSDAR on historical documents, including a
35 draft National Pollutant Discharge Elimination System ("NPDES") permit which was intended to update
36 an expired Clean Water Act permit that expired in 1996. She explained that because it is only a draft
37 permit and that it is important for the Panel to know when the final permit will be issued. Therefore,
38 she introduced a motion that Holtec, the EPA, and EEA or DEP appear before the Panel in March to
39 discuss issues related to permit issuance, levels of onsite contamination, means for protecting Cape Cod
40 Bay, site cleanup of contaminants, and restoration of the site for reuse. She explained that the Jones
41 River Watershed Association and Cape Cod Bay Watch have been monitoring this issue. She explained
42 that it is inappropriate to be relying on a draft permit during decommissioning, and that the expired
43 permit did not cover decommissioning-related topics. Mr. Lynch responded that the issue of an
44 outstanding permit is for the licensee. As Holtec is not currently the licensee, they may not be in
45 position to discuss this permit. Ms. duBois responded that she would therefore amend the motion to
46 also include Entergy because it is the current licensee. Mr. Lynch suggested starting with the
47 environmental agencies to discuss where they stand on the pending permit applications. Mr. Johnston
48 noted that a NPDES permit does not cover contamination levels at the site, and that the NPDES permit

1 covers the intake and the discharge. He suggested that addressing the process with the agencies for
2 moving the permit forward would be more appropriate. He also explained that the motion brings up
3 topics that are not covered by a NPDES permit, and that focusing on the NPDES permit only might be
4 productive. He also stated that issues involving groundwater and surface water require people with
5 different areas of expertise than NPDES. Mr. Priest stated that Entergy is required to keep a record of
6 on-site radiological spills, and that the Panel should review that information. Mr. Lynch responded that
7 he would look into whether this information is publicly available. Mr. Priest noted that the DEP could
8 follow up on non-radiological contaminants. Mr. Johnston responded that DEP regularly inspects the
9 site, and that those records are available. He also explained that a nuclear operator is required to notify
10 the DEP of releases or discoveries of certain contaminants, such as oil releases. He stated that there are
11 no unresolved releases at the Pilgrim site. He also explained that Pilgrim has a groundwater discharge,
12 and that the DEP entered into an administrative consent order with Entergy related to that
13 administrative consent order. This occurred because Entergy agreed to upgrade its nitrogen reduction
14 efforts within Pilgrim's treatment facility, and were issued a new permit whose requirements they faced
15 challenges to meet because of low flow. He noted that Entergy anticipates having a flow reduced to a
16 level below that required for a groundwater discharge permit for their sewer treatment facility. He
17 stated that this is publicly available information. Mr. Priest suggested using the NRC's website to review
18 plant status updates where events are recorded. Mr. Rothstein he was previously in contact with EPA
19 and DEP and was told that they were actively working toward finalizing this NPDES permit.

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21 Ms. duBois noted that the Panel still needs the information requested in her motion, but also noted that
22 it may require multiple segments. Chair Mullin asked for a second on the amended motion. Mr.
23 Coughlin asked whether the motion can be carried out as written. Mr. Johnston replied that he does not
24 believe that it could be done in its current form. Senator Wolf stated that the Panel needs background
25 on why the EPA did not do what it was required to do and DEP's role in that. He also noted that he
26 would like this information from EPA, but was not sure whether they could provide it. Ms. duBois stated
27 that the plant going offline and the NPDES permit changing increases the urgency with regard to this
28 permit. She also explained that the NPDES is a joint federal-state permit. She also noted that some
29 pipes are proposed to remain buried, and that it might be better to request their removal, but that more
30 information is needed to know whether that is necessary. Chair Mullin suggested asking only EPA to
31 appear in March. Mr. Johnston stated that this appears to be three or four motions in one, and
32 suggested that modifying the current NPDES permit and understanding EPA's opinions on that permit
33 could be productive. Mr. Smith clarified that in 1996 all Massachusetts power plant NPDES permits
34 were canceled and revised. Mr. Nichols suggested asking the IWG to address these issues rather than
35 having these entities appear before the Panel. Chair Mullin suggested a different motion, that the Panel
36 invite EPA and the chair of the IWG to come to the next meeting to hear the Panel's concerns. The
37 Panel can also ask the EPA about process concern. Between now and the March meeting, the working
38 groups could be convened to work out the details. Mr. Coughlin asked if guidance could be provided to
39 those entities for them to prepare to discuss. Mr. Johnston noted that it is not clear what the Panel
40 would want the guests to discuss. Mr. Priest stated that the issue to discuss is the process for issuing an
41 NPDES permit. If the EPA is the owner of that process, it is sensible for the EPA to appear to discuss its
42 process for the permit throughout decommissioning. Chair Mullin asked Mr. Priest to put that into
43 writing, and stated that Mr. Priest's suggestion would be the new motion.

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45 Ms. duBois withdrew her original motion in favor of Mr. Priest's revised, simplified motion. Mr. Priest
46 suggested working on the motion at the site cleanup subcommittee and bringing it back to the Panel.
47 With regard to timing for the EPA visit, Chair Mullin suggesting adding to the motion that it would occur

1 at the March meeting if possible or as soon as possible thereafter. Chair Mullin called for a second. It
2 was seconded and passed unanimously.

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4 **PANEL DISCUSSION OF WORKING GROUPS AND SECOND ANNUAL REPORT:**

5 Chair Mullin suggested reactivating the working groups and asked the Panel's thoughts on that topic.
6 Ms. duBois stated that the site cleanup and restoration working group should be meeting. Chair Mullin
7 asked her to look into reactivating it. Vice-Chair O'Reilly stated that the finance and economic working
8 group should also reconvene. Mr. Coughlin noted that the PSDAR working group may be unnecessary if
9 the IWG is doing the same work, but noted that Becky Ullman of the IWG had requested the Panel's
10 comments on the PSDAR. He asked if the Panel wants to provide suggestions or comments to her, or if
11 the Panel should instead defer to the IWG and its expertise, particularly in light of the approaching
12 deadlines. Chair Mullin noted that the IWG has reviewed both PSDARs. Mr. Johnston confirmed that,
13 and noted that the IWG would appreciate any comments the Panel can provide.

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15 For the 2019 annual report, Mr. Rothstein suggested updating the recommendations from the 2018
16 annual report. Mr. Coughlin noted that the 2018 report's longest section was the discussion of the
17 working groups. Since the working groups have not been meeting, instead, he suggested adding a
18 section describing priorities. He states that he Panel has a list of 15 priorities from Plymouth, and these
19 can be included. He stated that the Panel need not take a position on these. He also suggested adding a
20 list of the IWG's priorities. Following this section would be a description of the IWG's progress with
21 regard to their priorities. He stated that the next section could be the Panel's recommendations, if any.
22 He explained that the 2018 report included the full Panel's recommendations and also
23 recommendations from the working groups but noted that no government entities proved any
24 comments on them. Therefore, the working group recommendations may still be valid, and suggested
25 addressing those that are still valid in the 2019 report. Chair Mullin asked Mr. Coughlin to put this
26 approach to the 2019 report into writing, and stated that the Panel would discuss it further at the March
27 meeting.

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29 **NEW BUSINESS AND OLD BUSINESS:**

30 Chair Mullin asked the Panel members if they had any new business to discuss. Mr. Ciaramella asked if
31 there could be a regularly scheduled update from the IWG on each meeting's agenda. Chair Mullin
32 responded that the IWG update that took place at this meeting would be a regular part of future Panel
33 meetings.

34
35 Mr. Rothstein next read a prepared statement on the issue of site radiological exposure cleanup
36 standards. He noted a disagreement between certain parties on this topic, and pointed out that both
37 PSDAR cost estimates incorporate the 25 millirem limit rather than the stricter 10 millirem limit
38 endorsed by the Panel. He noted that that Holtec has not addressed the impact on its cost estimates
39 and 8-year DECON timeline if it is required to comply with the 10 millirem standard. He also noted that
40 any spills discovered during decommissioning will be addressed by the licensee.

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42 Mr. Coughlin noted that he reviewed calendar issued by MEMA to residents living within Pilgrim's 10-
43 mile emergency planning zone. He explained that it includes a statement that is misleading with regard
44 to the availability of potassium iodide at local pharmacies. He stated that he had checked with local
45 pharmacies and that none carry potassium iodide and are not aware of this statement by MEMA.

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47 Chair Mullin next asked the Panel members if they had any old business to discuss, to which no Panel
48 members responded.

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PUBLIC QUESTION AND ANSWER:

Jim Lampert noted that two requests to intervene were filed, one by the Attorney General and one by Pilgrim Watch. He stated that, if granted, there will be a hearing to determine whether the license transfer will go forward. Regarding comments on PSDARs, he stated that comments on Holtec’s PSDAR are due March 4, and if not submitted by then, the NRC will likely not consider them. He explained that any individuals present can submit comments by the deadline but that there are no hearings on comments. He noted that the Holtec PSDAR references a historical site analysis which appears to be an Entergy-prepared document describing the condition of the site. He recommended that the Panel request this document. He also noted that in addition to Plymouth, other municipalities have local concerns.

Chair Mullin called for a motion to request the historical site analysis mentioned by Mr. Lampert. It was moved and seconded and passed unanimously. Chair Mullin stated that he would send a note to Holtec and Entergy requesting this information.

Mary Lampert noted that the two license transfer interventions were similar and included two contentions. One contention was a shortcoming in funds to complete decommissioning. The second was a concern that the funds allocated would indicate a quick but not thorough job. She noted that cost assumptions may be based on incomplete information.

David Noyes stated that he made his comments at the January meeting and at tonight’s meeting as a private citizen and not as a representative of Entergy. He requested that the Panel reconsider advocating for the 10 millirem cleanup standard. He stated that supporters of the 10 millirem standard have referenced a biological effects of ionizing radiation (“BEIR”) report that may inflate the likelihood of cancer from exposure to small doses of radiation. He stated that scientific bodies support this view. He stated that the requirements of meeting the 10 millirem limit may deplete the decommissioning trust fund unnecessarily.

John Garley stated that he is concerned about the safety of the dry casks and asked about the grade of steel used to build them. He cited a report describing how steel can corrode in salt water, and asked if there is enough money in the trust fund to repair the cracks. Senator Wolf suggested asking the IWF to include a report on the integrity of the casks in their work.

Diane Turco stated that the San Onofre casks have a 25-year warranty on the canister and a 10-year warranty on the below concrete structure. She noted that Entergy may have made a misleading remark with regard to Holtec’s experience at decommissioning. She stated that there is evidence at Pilgrim of a poor safety culture and issues with casks. She also asked if a car could drive onto the Pilgrim site. Mr. Lynch responded that Pilgrim’s security measure includes multiple layers of fencing, video equipment, and additional measures.

Meg Sheehan stated that Pilgrim has injected radionuclides into the environment at Pilgrim and stated that studies have shown increased cancer rates in Plymouth. She stated that regulators do not know what is in the groundwater at the Pilgrim site and stated that an NPDES is necessary prior to decommissioning, and she encouraged the Panel to fill in where regulators have fallen short. She also stated that a millirem level less strict than 10 millirem is inadvisable.

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WRAP UP AND ADJOURN

Mr. Rothstein noted with regard to reviewing the PSDARs that the delays caused by interventions could be lengthy.

Senator Wolf asked why the comment period for the Holtec PSDAR is due before the Entergy PSDAR comment period, and asked if an extension can be granted for the Holtec PSDAR comment period.

Mr. Priest provided the contact information for the NRC regarding a comment period extension. Mr. Coughlin suggested asking the IWG if it would also request a comment period extension. Chair Mullin suggested a motion that the Panel direct the chair to contact the NRC explaining its concerns and requesting an extension of the March 4 Holtec PSDAR comment period deadline until a date after license transfer is complete. Mr. Priest explained that the NRC makes no judgment on the PSDARs, and that it is simply accepted or not. Chair Mullin suggested a motion that he contact the NRC to describe the Panel’s concerns and offer to put those concerns into writing. He called for a motion which was made and seconded and passed unanimously.

Chair Mullin called for a motion to adjourn. It was so moved and seconded.

Meeting adjourned at approximately 8:45 p.m.